Beatriz Pelaz

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

93
papers

5,718
citations

34
h-index

75
g-index

99
ext. papers

8.9
avg, IF

L-index

| # | Paper | IF | Citations |
|----|--|------|-----------|
| 93 | Diverse Applications of Nanomedicine. <i>ACS Nano</i> , 2017 , 11, 2313-2381 | 16.7 | 714 |
| 92 | Surface Functionalization of Nanoparticles with Polyethylene Glycol: Effects on Protein Adsorption and Cellular Uptake. <i>ACS Nano</i> , 2015 , 9, 6996-7008 | 16.7 | 587 |
| 91 | Protein corona formation around nanoparticles (from the past to the future. <i>Materials Horizons</i> , 2014 , 1, 301-313 | 14.4 | 401 |
| 90 | CuTe nanocrystals: shape and size control, plasmonic properties, and use as SERS probes and photothermal agents. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7098-101 | 16.4 | 342 |
| 89 | The challenge to relate the physicochemical properties of colloidal nanoparticles to their cytotoxicity. <i>Accounts of Chemical Research</i> , 2013 , 46, 743-9 | 24.3 | 297 |
| 88 | Dissecting the molecular mechanism of apoptosis during photothermal therapy using gold nanoprisms. <i>ACS Nano</i> , 2015 , 9, 52-61 | 16.7 | 260 |
| 87 | The state of nanoparticle-based nanoscience and biotechnology: progress, promises, and challenges. <i>ACS Nano</i> , 2012 , 6, 8468-83 | 16.7 | 188 |
| 86 | Selected Standard Protocols for the Synthesis, Phase Transfer, and Characterization of Inorganic Colloidal Nanoparticles. <i>Chemistry of Materials</i> , 2017 , 29, 399-461 | 9.6 | 176 |
| 85 | Interfacing engineered nanoparticles with biological systems: anticipating adverse nano-bio interactions. <i>Small</i> , 2013 , 9, 1573-84 | 11 | 154 |
| 84 | Tailoring the synthesis and heating ability of gold nanoprisms for bioapplications. <i>Langmuir</i> , 2012 , 28, 8965-70 | 4 | 145 |
| 83 | Dual Enzymatic Reaction-Assisted Gemcitabine Delivery Systems for Programmed Pancreatic Cancer Therapy. <i>ACS Nano</i> , 2017 , 11, 1281-1291 | 16.7 | 129 |
| 82 | In vitro interaction of colloidal nanoparticles with mammalian cells: What have we learned thus far?. <i>Beilstein Journal of Nanotechnology</i> , 2014 , 5, 1477-90 | 3 | 114 |
| 81 | Gold nanoprisms as optoacoustic signal nanoamplifiers for in vivo bioimaging of gastrointestinal cancers. <i>Small</i> , 2013 , 9, 68-74 | 11 | 108 |
| 80 | Basic Physicochemical Properties of Polyethylene Glycol Coated Gold Nanoparticles that Determine Their Interaction with Cells. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 5483-7 | 16.4 | 103 |
| 79 | Influence of Size and Shape on the Anatomical Distribution of Endotoxin-Free Gold Nanoparticles. <i>ACS Nano</i> , 2017 , 11, 5519-5529 | 16.7 | 99 |
| 78 | Tumour homing and therapeutic effect of colloidal nanoparticles depend on the number of attached antibodies. <i>Nature Communications</i> , 2016 , 7, 13818 | 17.4 | 93 |
| 77 | Engineering biofunctional magnetic nanoparticles for biotechnological applications. <i>Nanoscale</i> , 2010 , 2, 1746-55 | 7.7 | 90 |

(2015-2015)

| 76 | Phase Transfer and Polymer Coating Methods toward Improving the Stability of Metallic Nanoparticles for Biological Applications. <i>Chemistry of Materials</i> , 2015 , 27, 990-997 | 9.6 | 87 |
|----|--|-----------------|----|
| 75 | How Entanglement of Different Physicochemical Properties Complicates the Prediction of in Vitro and in Vivo Interactions of Gold Nanoparticles. <i>ACS Nano</i> , 2018 , 12, 10104-10113 | 16.7 | 81 |
| 74 | Advances toward More Efficient Targeted Delivery of Nanoparticles in Vivo: Understanding Interactions between Nanoparticles and Cells. <i>ACS Nano</i> , 2017 , 11, 2397-2402 | 16.7 | 78 |
| 73 | Model Driven Optimization of Magnetic Anisotropy of Exchange-coupled Core-Shell Ferrite Nanoparticles for Maximal Hysteretic Loss. <i>Chemistry of Materials</i> , 2015 , 27, 7380-7387 | 9.6 | 76 |
| 72 | Homogeneous Biosensing Based on Magnetic Particle Labels. Sensors, 2016, 16, | 3.8 | 65 |
| 71 | High-Content Imaging and Gene Expression Approaches To Unravel the Effect of Surface Functionality on Cellular Interactions of Silver Nanoparticles. <i>ACS Nano</i> , 2015 , 9, 10431-44 | 16.7 | 61 |
| 70 | Colloidal Gold Nanoparticles Induce Changes in Cellular and Subcellular Morphology. <i>ACS Nano</i> , 2017 , 11, 7807-7820 | 16.7 | 60 |
| 69 | Aqueous Stable Gold Nanostar/ZIF-8 Nanocomposites for Light-Triggered Release of Active Cargo Inside Living Cells. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 7078-7082 | 16.4 | 58 |
| 68 | Interaction of stable colloidal nanoparticles with cellular membranes. <i>Biotechnology Advances</i> , 2014 , 32, 679-92 | 17.8 | 58 |
| 67 | The effect of static magnetic fields and tat peptides on cellular and nuclear uptake of magnetic nanoparticles. <i>Biomaterials</i> , 2010 , 31, 4392-400 | 15.6 | 58 |
| 66 | Sterilization matters: consequences of different sterilization techniques on gold nanoparticles. Small, 2010 , 6, 89-95 | 11 | 56 |
| 65 | Characterization of gold nanoparticles with different hydrophilic coatings via capillary electrophoresis and Taylor dispersion analysis. Part I: determination of the zeta potential employing a modified analytic approximation. <i>Journal of Colloid and Interface Science</i> , 2015 , 450, 288-30 | 9.3 0 | 51 |
| 64 | Charge and agglomeration dependent in vitro uptake and cytotoxicity of zinc oxide nanoparticles. Journal of Inorganic Biochemistry, 2015 , 153, 334-338 | 4.2 | 48 |
| 63 | Gold-Based Nanomaterials for Applications in Nanomedicine. <i>Topics in Current Chemistry</i> , 2016 , 370, 169 | -202 | 43 |
| 62 | Plasmonic-driven thermal sensing: ultralow detection of cancer markers. <i>Chemical Communications</i> , 2013 , 49, 3676-8 | 5.8 | 41 |
| 61 | Functionalized FeD ® Au superparamagnetic nanoparticles: in vitro bioactivity. <i>Nanotechnology</i> , 2012 , 23, 315102 | 3.4 | 40 |
| 60 | The impact of species and cell type on the nanosafety profile of iron oxide nanoparticles in neural cells. <i>Journal of Nanobiotechnology</i> , 2016 , 14, 69 | 9.4 | 35 |
| 59 | Characterization of hydrophilic coated gold nanoparticles via capillary electrophoresis and Taylor dispersion analysis. Part II: Determination of the hydrodynamic radius distribution - Comparison with asymmetric flow field-flow fractionation. <i>Journal of Colloid and Interface Science</i> , 2015 , 457, 131-40 | 9.3 | 33 |

| 58 | Quantitative uptake of colloidal particles by cell cultures. <i>Science of the Total Environment</i> , 2016 , 568, 819-828 | 10.2 | 33 |
|----|---|------|----|
| 57 | Comparison of the Uptake and Toxicity of Collagen- and Synthetic Polymer-Coated Gold Nanoparticles. <i>Nanomaterials</i> , 2015 , 5, 1418-1430 | 5.4 | 30 |
| 56 | Particle-based optical sensing of intracellular ions at the example of calcium - what are the experimental pitfalls?. <i>Small</i> , 2015 , 11, 896-904 | 11 | 27 |
| 55 | Metal ions in the context of nanoparticles toward biological applications. <i>Current Opinion in Chemical Engineering</i> , 2014 , 4, 88-96 | 5.4 | 27 |
| 54 | Asymmetric Negishi reaction for sterically hindered couplings: synthesis of chiral binaphthalenes. <i>Tetrahedron: Asymmetry</i> , 2006 , 17, 2593-2595 | | 27 |
| 53 | Optimizing conditions for labeling of mesenchymal stromal cells (MSCs) with gold nanoparticles: a prerequisite for in vivo tracking of MSCs. <i>Journal of Nanobiotechnology</i> , 2017 , 15, 24 | 9.4 | 26 |
| 52 | Evaluation of quantum dot cytotoxicity: interpretation of nanoparticle concentrations versus intracellular nanoparticle numbers. <i>Nanotoxicology</i> , 2016 , 10, 1318-28 | 5.3 | 26 |
| 51 | Tracking stem cells and macrophages with gold and iron oxide nanoparticles The choice of the best suited particles. <i>Applied Materials Today</i> , 2019 , 15, 267-279 | 6.6 | 26 |
| 50 | Synthesis, Characterization, and Evaluation of Superparamagnetic Doped Ferrites as Potential Therapeutic Nanotools. <i>Chemistry of Materials</i> , 2020 , 32, 2220-2231 | 9.6 | 25 |
| 49 | Inhibition of the cancer-associated TASK 3 channels by magnetically induced thermal release of Tetrandrine from a polymeric drug carrier. <i>Journal of Controlled Release</i> , 2016 , 237, 50-60 | 11.7 | 25 |
| 48 | Investigating the role of shape on the biological impact of gold nanoparticles in vitro. <i>Nanomedicine</i> , 2015 , 10, 2643-57 | 5.6 | 24 |
| 47 | Conjugation of Polymer-Coated Gold Nanoparticles with Antibodies-Synthesis and Characterization. <i>Nanomaterials</i> , 2015 , 5, 1297-1316 | 5.4 | 24 |
| 46 | Colloidal bioplasmonics. <i>Nano Today</i> , 2018 , 20, 58-73 | 17.9 | 22 |
| 45 | Dissecting common and divergent molecular pathways elicited by CdSe/ZnS quantum dots in freshwater and marine sentinel invertebrates. <i>Nanotoxicology</i> , 2017 , 11, 289-303 | 5.3 | 21 |
| 44 | Nanoparticle dosage-a nontrivial task of utmost importance for quantitative nanosafety research. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2016 , 8, 479-92 | 9.2 | 20 |
| 43 | The role of intracellular trafficking of CdSe/ZnS QDs on their consequent toxicity profile. <i>Journal of Nanobiotechnology</i> , 2017 , 15, 45 | 9.4 | 18 |
| 42 | Highly active antibody-modified magnetic polyelectrolyte capsules. <i>Journal of Colloid and Interface Science</i> , 2016 , 474, 1-8 | 9.3 | 18 |
| 41 | Core-Shell Palladium/MOF Platforms as Diffusion-Controlled Nanoreactors in Living Cells and Tissue Models. <i>Cell Reports Physical Science</i> , 2020 , 1, 100076 | 6.1 | 16 |

(2012-2017)

| 40 | Multiparametric analysis of anti-proliferative and apoptotic effects of gold nanoprisms on mouse and human primary and transformed cells, biodistribution and toxicity in vivo. <i>Particle and Fibre Toxicology</i> , 2017 , 14, 41 | 8.4 | 16 |
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| 39 | Photothermal effects on protein adsorption dynamics of PEGylated gold nanorods. <i>Applied Materials Today</i> , 2019 , 15, 599-604 | 6.6 | 15 |
| 38 | Homogeneous Protein Analysis by Magnetic Core-Shell Nanorod Probes. <i>ACS Applied Materials & Amp; Interfaces</i> , 2016 , 8, 8893-9 | 9.5 | 15 |
| 37 | 808hm-activable core@multishell upconverting nanoparticles with enhanced stability for efficient photodynamic therapy. <i>Journal of Nanobiotechnology</i> , 2020 , 18, 85 | 9.4 | 13 |
| 36 | Enhanced All-Optical Modulation of Terahertz Waves on the Basis of Manganese Ferrite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 21634-21640 | 3.8 | 13 |
| 35 | Choose your cell model wisely: The in vitro nanoneurotoxicity of differentially coated iron oxide nanoparticles for neural cell labeling. <i>Acta Biomaterialia</i> , 2017 , 55, 204-213 | 10.8 | 12 |
| 34 | Polymer-coated nanoparticles: Carrier platforms for hydrophobic water- and air-sensitive metallo-organic compounds. <i>Pharmacological Research</i> , 2017 , 117, 261-266 | 10.2 | 12 |
| 33 | Investigating Possible Enzymatic Degradation on Polymer Shells around Inorganic Nanoparticles. <i>International Journal of Molecular Sciences</i> , 2019 , 20, | 6.3 | 12 |
| 32 | Nanoparticles engineered to bind cellular motors for efficient delivery. <i>Journal of Nanobiotechnology</i> , 2018 , 16, 33 | 9.4 | 12 |
| 31 | In vivo ultrasound-activated delivery of recombinant tissue plasminogen activator from the cavity of sub-micrometric capsules. <i>Journal of Controlled Release</i> , 2019 , 308, 162-171 | 11.7 | 10 |
| 30 | Aqueous stable luminescent perovskite-polymer composites. <i>Applied Materials Today</i> , 2019 , 15, 562-569 | 96.6 | 9 |
| 29 | Aqueous Stable Gold Nanostar/ZIF-8 Nanocomposites for Light-Triggered Release of Active Cargo Inside Living Cells. <i>Angewandte Chemie</i> , 2019 , 131, 7152-7156 | 3.6 | 9 |
| 28 | Introducing Students to Surface Modification and Phase Transfer of Nanoparticles with a Laboratory Experiment. <i>Journal of Chemical Education</i> , 2017 , 94, 769-774 | 2.4 | 8 |
| 27 | Direct protein quantification in complex sample solutions by surface-engineered nanorod probes. <i>Scientific Reports</i> , 2017 , 7, 4752 | 4.9 | 8 |
| 26 | Fluorescence-based ion-sensing with colloidal particles. <i>Current Opinion in Pharmacology</i> , 2014 , 18, 98-1 | 031 | 8 |
| 25 | Real-time, label-free monitoring of cell viability based on cell adhesion measurements with an atomic force microscope. <i>Journal of Nanobiotechnology</i> , 2017 , 15, 23 | 9.4 | 7 |
| 24 | Magnetic Nanoparticles for Cancer Therapy and Bioimaging. <i>Nanomedicine and Nanotoxicology</i> , 2018 , 239-279 | 0.3 | 7 |
| 23 | Synthesis Applications of Gold Nanoparticles. <i>Frontiers of Nanoscience</i> , 2012 , 3-33 | 0.7 | 7 |

| 22 | New Approaches in Nanomedicine for Ischemic Stroke. <i>Pharmaceutics</i> , 2021 , 13, | 6.4 | 7 |
|----|---|------|---|
| 21 | Basic Physicochemical Properties of Polyethylene Glycol Coated Gold Nanoparticles that Determine Their Interaction with Cells. <i>Angewandte Chemie</i> , 2016 , 128, 5573-5577 | 3.6 | 7 |
| 20 | Enhanced Terahertz Radiation Generation of Photoconductive Antennas Based on Manganese Ferrite Nanoparticles. <i>Scientific Reports</i> , 2017 , 7, 46261 | 4.9 | 6 |
| 19 | Antireflection self-reference method based on ultrathin metallic nanofilms for improving terahertz reflection spectroscopy. <i>Optics Express</i> , 2018 , 26, 19470-19478 | 3.3 | 5 |
| 18 | Hyperthermia Using Inorganic Nanoparticles. Frontiers of Nanoscience, 2012, 309-335 | 0.7 | 5 |
| 17 | In depth characterisation of the biomolecular coronas of polymer coated inorganic nanoparticles with differential centrifugal sedimentation. <i>Scientific Reports</i> , 2021 , 11, 6443 | 4.9 | 5 |
| 16 | Aerogelation of Polymer-Coated Photoluminescent, Plasmonic, and Magnetic Nanoparticles for Biosensing Applications. <i>ACS Applied Nano Materials</i> , 2021 , 4, 6678-6688 | 5.6 | 4 |
| 15 | Hyperspectral-enhanced dark field analysis of individual and collective photo-responsive gold-copper sulfide nanoparticles. <i>Nanoscale</i> , 2021 , 13, 13256-13272 | 7.7 | 4 |
| 14 | Plasmonic Cell-Derived Nanocomposites for Light-Controlled Cargo Release inside Living Cells. <i>Advanced Biology</i> , 2020 , 4, e1900260 | 3.5 | 4 |
| 13 | Nanoparticle behavior and stability in biological environments 2020 , 5-18 | | 3 |
| 12 | Nanoprisms: Gold Nanoprisms as Optoacoustic Signal Nanoamplifiers for In Vivo Bioimaging of Gastrointestinal Cancers (Small 1/2013). <i>Small</i> , 2013 , 9, 67-67 | 11 | 2 |
| 11 | Optical biosensor technologies for molecular diagnostics at the point-of-care 2015, | | 2 |
| 10 | Aqueous Synthesis of Copper(II)-Imidazolate Nanoparticles. <i>Inorganic Chemistry</i> , 2018 , 57, 12056-12065 | 5.1 | 2 |
| 9 | Design and characterization of functional nanoparticles for enhanced bio-performance. <i>Methods in Molecular Biology</i> , 2013 , 1051, 165-207 | 1.4 | 1 |
| 8 | Sonosensitive capsules for brain thrombolysis increase ischemic damage in a stroke model <i>Journal of Nanobiotechnology</i> , 2022 , 20, 46 | 9.4 | 1 |
| 7 | Plasmonic-Assisted Thermocyclizations in Living Cells Using Metal-Organic Framework Based Nanoreactors. <i>ACS Nano</i> , 2021 , 15, 16924-16933 | 16.7 | 1 |
| 6 | REAP: revealing drug tolerant persister cells in cancer using contrast enhanced optical coherence and photoacoustic tomography. <i>JPhys Photonics</i> , 2021 , 3, 021001 | 2.5 | 1 |
| 5 | Colloidal stability of polymer coated zwitterionic Au nanoparticles in biological media. <i>Inorganica Chimica Acta</i> , 2022 , 534, 120820 | 2.7 | O |

LIST OF PUBLICATIONS

Journal of Molecular Sciences, 2022, 23, 5763

- Monodisperse superparamagnetic nanoparticles separation adsorbents for high-yield removal of 6 О 4 arsenic and/or mercury metals in aqueous media. Journal of Molecular Liquids, 2021, 335, 116485 Pathways Related to NLRP3 Inflammasome Activation Induced by Gold Nanorods. International 6.3
- Synthesis and Surface Engineering of Gold Nanoparticles, and Their Potential Applications in Bionanotechnology 2017,
- Sterilization Case Study 1: Effects of Different Sterilization Techniques on Gold Nanoparticles. Frontiers in Nanobiomedical Research, 2016, 77-92